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DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

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FILE COPY

FILE No. 143

MONTHLY REPORT

for

December, 1923.

DECEMBER, 1923.

J. E. F. NOTE

January 3, 1924.

Dear Sir:

The following is my report on conditions in the Yellowstone National Park and on the operation of the park for the month of December, 1923:

I. GENERAL CONDITIONS

Road conditions have been quite satisfactory during the greater part of the month. Motor trucks were operated by the Transportation Company between Mammoth and Lake during the first eight days of the month, at which time they were discontinued because of snow depths on the divide between Norris and Canyon. However, this particular road has been kept open throughout the month and a great deal of heavy hauling has been done. Four horse sleighs have been used exclusively since the eighth. The snow plow has been put into service at Mammoth following the storm period beginning on the 24th, but has not been used to any extent except about the buildings and grounds. Trucks and passenger cars have operated freely at all times between Gardiner and Mammoth. The Cooke City passenger stage has discontinued the use of their motor truck and uses teams to transport mail. The truck was operated as far as Soda Butte Cabin until the 24th, the mail being relayed from there to Cooke City with teams. All park roads, except between Gardiner and Mammoth, are now closed to motor traffic. There is about 40 inches of snow on the divide between Canyon and Norris at the close of the month.

Weather

The following records are quoted from the report for December of the Observer in charge of the local United States Weather Bureau at Mammoth Hot Springs, Park Headquarters:

Temperature: Monthly mean, 17.6° , is 4.6° below normal, and the coldest since 1919. Temperatures were generally below normal except during the third week, which was moderately warm. The highest

was 44° on the 16th. The month terminated in a cold wave of extreme severity, the lowest temperature being 34° below zero on the 31st, which is not only the lowest of record for December, but with the exception of -41° January 14, 1888 and -36° February 12, 1905, is the lowest for the entire period of record for the past 37 years.

Precipitation: Total, 1.22 inches, is 0.60 inch below normal.

Snowfall: Total 12.8 inches; normal 15.2 inches. Except for about 3.0 inches of snow at end of the first week, practically no snow occurred until the 24th, when snow accompanied by strong to heavy winds set in and prevailed with increased intensity until the 31st, the total snowfall for the storm period being 8.7 inches, with 11.0 inches on the ground at the close of the month.

Wind: Average hourly velocity 8.3 miles; normal 8.0. The maximum velocity of 40 miles per hour from the south on the 6th has been exceeded three times in December in the past 20 years. A velocity of 37 miles from the NW occurred on the 29th.

Sunshine: Percentage of possible 44; normal 39.

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Snow Depths: Rangers on stations report the following snow depths at the close of the month. Snow depths of December 31st, 1922, are also given for purposes of comparison:

<u>Station</u>	<u>1922</u>	<u>1923</u>
Mammoth	13.8	11
Norris	--	24
Riverside	24	30
Gallatin	22	23
Lake	--	24
Canyon	34	40
Buffalo Ranch	15	24
Soda Butte Station	26	25
Slough Creek	--	20
Hellroaring	--	22

The unusually low temperatures of the 30th and 31st were general throughout the park. Mammoth reported 34 below zero, Gallatin 40 below, Lake 31 below, Buffalo Ranch 50 below and correspondingly low temperatures were reported from other points.

Travel

No visitors were registered at any of the park entrances during the month.

II. PERSONNEL:

On December 1st there were 66 appointees on the payrolls and on December 31st there were 68. The following list shows the number of appointees of various classes serving during the month, with a general statement of the kind of work in which they were engaged:

<u>No.</u>	<u>Class</u>	<u>Kind of Work Performed</u>
1	Superintendent	General administration and supervision of all activities in the park.
1	Asst. Superintendent	Administration, purchasing, disbursing.
2	Asst. Engineers	1 in charge of engineering work in park, 1 assisting.
6	Clerks	1 Financial Clerk; 1 Cost Accounting Clerk; 1 Personnel and File Clerk; 1 Clerk on orders, proposals and vouchers, also handling time and payroll work; 2 Stenographer-typists on stenographic work for Superintendent (one on L.W.O.P. commencing Dec. 21.)
3	Electricians	Operated power plant regular shift, including Sundays, read meters, did necessary line work.
3	Foremen	1 in charge of headquarters corral and freighting work about headquarters; one on road and construction work; one repairing sprinkler and dump wagons.
1	Telegrapher	Sent and received all Government Western Union messages, operated one shift on telephone switchboard.
2	Telephone Switchboard Operators	Operated telephone switchboard daily shifts, including Sunday.
1	Master Mechanic	In charge of shops and of repair to heavy road machinery.
2	Blacksmiths	General blacksmith work, including shoeing of horses in shop, overhauling and repairing tools and equipment. (One temporary, entered on duty Dec. 1.)
1	Machinist	Repairing equipment. (Entered on duty December 11, temporary appointment.)
1	Master Painter	General shop work including painting equipment and buildings.

<u>No.</u>	<u>Class</u>	<u>Kind of Work Performed</u>
5	Laborers	Teaming, freighting, assisting mechanics and miscellaneous work at headquarters.
1	Steward and Master of Transportation	In charge of all transportation and of storehouses.
1	Chief Buffalo Keeper	In charge of hay ranch operations at Slough Creek; one assisting.
1	Buffalo Herder	Assisting Buffalo Keeper
1	Master Plumber	In charge of general plumbing and water and sewer systems.
1	Auto Mechanic	On duty in power plant.
1	Carpenter	Repairing buildings at headquarters.
1	Chief Park Ranger	In charge of ranger force.
1	First Asst. Chief Park Ranger.	In charge of Northern District.
1	Asst. Chief Park Ranger	1 on duty at Lake District.
21	Park Rangers (15 WAE)	Patrolling, protection of game, miscellaneous duties.
7	Temporary Park Rangers	Patrolling, miscellaneous duties. (One given WAE appointment.)

Leaves of Absence

William Wiggins, Master Plumber, December 1-3 (noon), 1-3/2 days.
Daniel W. Tripp, Laborer, December 5-12, 7 days.
Joseph Douglas, Assistant Chief Park Ranger, December 6-8, 3 days.
Joseph Joffe, Clerk, December 6-8, 3 days.
Samuel T. Woodring, Chief Ranger, December 6-8, 3 days.
Anna E. Madsen, Clerk, December 8; Dec. 12 (noon); Dec. 16 (noon); Dec. 24 (noon), 2-1/2 days
Julia S. Stockett, Clerk, December 11-20, 9 days.
Joseph Cummings, Laborer, December 8 (noon), 1/2 day.
Andrew R. Edwin, Clerk, December 20-31, 9 days.
Forest L. Carter, Park Ranger, December 18-31, 11 days.
Clifford Anderson, Park Ranger, December 21-31, 8 days.
Bert L. Stimmett, Master Mechanic, December 22, 1 day.
Harry J. Lick, Park Ranger, December 24-29, 5 days.
Charlie R. Stimmett, Blacksmith, December 22 (noon)-31, 6-1/2 days.
Deate T. White, Foreman, December 27-31, 4 days.
William Wiggins, Master Plumber, December 24, 1 day.

Earl Bowman, Park Ranger, December 24-31, 6 days.
James N. Dupuis, Park Ranger, December 24-29, 5 days.
Norman A. Nerison, Park Ranger, December 20-31, 9 days.
August C. Neumann, Painter, December 28-31, 3 days.
Birt Vink, Blacksmith, December 24-29, 5 days.

Sick Leave

Fred Finch, Park Ranger, December 6-8, 3 days.

Furlough

Julia S. Stockett, leave without pay commencing December 21, 1923, to March 20, inclusive, 1924.

In addition to the regular employees listed above under appointment, the following were employed temporarily by the day:

	<u>December 1st</u>	<u>December 31st</u>
Skilled Laborers	8	2
Two-horse teamster	1	
Laborers	3	1
Truck Driver	<u>1</u>	<u>1</u>
	13	4
Appointees	<u>66</u>	<u>68</u>
Total	79	72

III. WORK COMPLETED

(b) Maintenance and Repair of Physical Improvements

Shoshone Forest Road: Repair work on the Elk Fork bridge was continued until December 17th when the crew was disbanded for the winter. All equipment was stored at Wapiti Ranger station, except the truck and Ford car which were stored in the Cody garage. During the month of November a cofferdam was constructed around the damaged abutment of the bridge, water pumped out and material excavated to about one foot below the bottom of the abutment. A double row of piles were driven to refusal around the abutment and the upper wing wall. The piles were then cut off below water line and a footing of concrete, three to six feet thick, was placed on the piles and worked under the abutment. Due to cold weather it was not advisable to complete the concrete work this winter.

(c) Miscellaneous Improvement Work

Surveys were made of the following sites occupied by Park operators: Yellowstone Park Transportation Company at Mammoth; Yellowstone Park Hotel Company, Mammoth Hotel site and two others; Yellowstone Park Camps Company

at Mammoth and Willow Park; George Whittaker's store and other buildings at Mammoth; Pryor & Trischman's store at Mammoth.

Good progress is being made with the office work in connection with these surveys. The areas and traverses are worked out and a number of plats completed.

IV. WORK IN PROGRESS.

(a) Construction of Physical Improvements

Improvements by Park Utilities:

Yellowstone Park Hotel Company:

Lake Hotel: The November report showed roughing in of hot and cold water pipes 80% completed. Nothing further was done on this work during December.

The dining room addition and rooms above are virtually completed. Wiring, plumbing and plastering were finished during the month.

All partitions in the addition to the kitchen are now in and the lathing and plastering is practically finished.

The additions to the engine room are nearing completion. Foundations are all in and machinery set. About all that remains to be done is the laying of the floor.

The rewiring of the old rooms is going steadily but not rapidly forward as this work is mostly being done by the caretaker.

Canyon Hotel:

The roughing in of hot and cold water pipes for running water in all rooms was completed during the month; fixtures will not be installed until spring.

Mammoth Hotel:

The rewiring of the old part of the hotel has been completed except that new fixtures are yet to be attached.

The new kitchen is closed in and roofed, and partitions are all in and ready to lath and plaster. A few odds and ends of plumbing are yet to be done.

New kitchen equipment for Lake Hotel and replacements for Canyon are now being moved up.

No construction work at either Canyon or Mammoth Hotels was in progress at the close of the month, but a crew will be on hand for renewed operations at Mammoth about February 1st. The entire working force, of the Hotel and Transportation Companies was reduced about 50% just before the holidays.

Yellowstone Park Transportation Company:

No new construction during the month.

The usual winter work of overhauling and repairing cars was pursued throughout the month, and good progress has been made. The number of workmen was materially reduced just prior to the holidays.

Yellowstone Park Camps Company:

The Camps Company reports no new construction during the month. Two men are employed in repairing and making furniture, and only one man is employed in the garage.

(c) Miscellaneous Improvement Work

The Master Painter papered the hallway and grained floors at Dr. Wolfe's quarters; varnished floors at Robinson's quarters; worked at signs, taking them down, etc.; finished work on fire equipment, and miscellaneous work about buildings, stormash, etc. Took inventory, and was on leave three days.

The Master Mechanic and his assistants repaired cars and trucks, and general equipment. Completely overhauled Reo trucks #15 and 25, and I.H.C. #23, and Signal #8 are being converted into sprinkler trucks. Also did minor work on hay trucks. Inventory, 7 days.

The Carpenter made minor repairs to buildings and helped build a woodsaw shed; also set up saw.

The Blacksmith shod horses, overhauled six graders, put sprinkler tank and valves on I.H.C. truck #23, which is being converted into sprinkler truck, and overhauled air compressor.

The Steward and Master of Transportation supervised the hauling and storage of forage, freight, etc. Hay and coal were hauled from Gardiner to Mammoth and two trucks, two drivers and one swamper were used. A complete inventory was taken and supply cards balanced.

The Master Plumber and his assistants maintained the water and sewer systems at Mammoth; made repairs to inside plumbing and heating systems in the various buildings at Mammoth. Work was commenced on the heating plant which is to be installed at the garage.

Buildings and Corrals: The foreman and two men took care of the stables, corrals and furnaces. The snowplow was put into operation on December 26. An inventory was taken of stock.

The Telephone System and Power Plant were operated in the usual manner. The Power Plant was run constantly with the results shown in comparison for December, 1922, as follows:

	<u>1922</u>	<u>1923</u>
Total current generated, in KWH	24,740	24,132
Of this, sold to public utilities at 5¢ per KWH	1,733	3,425
Consumed for street lighting	2,732	1,260
Balance, consumed in Government buildings, for power and lighting, lost on lines in transit	20,275	4,685
Peak load during month in KWH	70	98

The Telephone and Switchboard Office was open daily from 7:30 A.M. to 8:45 P.M. The total business handled was as follows:

Switchboard Calls

On Government local lines.....	2598
On Hotel Company lines.....	377
On Long Distance connections.....	149
Total	4124

Telegrams

Government sent.....	71
Commercial sent.....	38
Total	109

Government received.....	39
Commercial received.....	41
Total	80

Office Force

The office force was busy with usual routine work which includes orders, payment of vouchers, preparation of accounts, reports, general correspondence, etc. 625 pieces of official mail were received and 742 were sent out during the month.

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In compliance with office circular dated December 1, 1922, a complete physical inventory was taken of Government materials in the following departments, as of January 1, 1924:

Storehouse	(Mr. Brant)
Plumbing	(Mr. Wiggins)
Electrical	(Mr. Allan)
Painting	(Mr. Neumann)
Shops	(Mr. B. Stinnett)
Stables	(Mr. McFarland)

The inventory sheets submitted are being carefully examined and copies are being prepared for the respective departments and for use by the office. A system of "purchases" and "issues" between January 1 and June 30 is maintained, with the present inventory sheets as a basis of examination, and this is supplemented on July 1st with figures to be incorporated into the cost accounting work. This system has proven very successful, and the heads of the various departments are realizing the importance of keeping an accurate check of the material under their charge and supervision.

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Superintendent Albright left the Park on December 2nd for California, where he expects to be until the middle of January in his capacity as Field

Assistant to the Director, after which he ^{will} leave for Washington, D.C.

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Ranger Patrols and Activities

The work of the ranger department has gone forward with regularity and promptness. All patrols have been promptly made from the various stations and very satisfactory conditions prevail throughout the park.

Constant patrols were maintained along the north boundary throughout the hunting season, which closed on December 20, and First Assistant Chief Ranger Trischman made frequent trips to Crevice, Hellroaring, Slough Creek and other points in the north district, and reported highly satisfactory conditions at all times. Mounted patrols have been made from all points in the park previous to December 10th. The last of the horses were brought in from outlying districts on the 11th; the horses from Lake Station arriving on that day. Ranger transportation is now limited to skis and snowshoes.

Rangers Bowman and Keate returned to Lake Station from a patrol of the Upper Yellowstone District on the afternoon of the 5th; this patrol was unusual in that mounted patrols are rarely made in that district so late in the season.

Rangers Finch and Ogston patrolled up the middle fork of Cache Creek to a point one mile east of the park boundary, from which point they were obliged to return with their horses on account of the deep snow. This patrol was made to determine whether there were any unlicensed trappers operating in that district east of the park line. No signs of any trapping activities have been observed in that district to date, and further patrols will be regularly made in the Cache Creek and Miller Creek country to points east of the park boundary.

Rangers Frazier and Brown were moved from Crevice Station on the 24th. This station will be used during the winter season as a Snowshoe Cabin.

Ranger Brown will be stationed at Hoppe's Ranch to observe and protect the antelope during the winter, and to assist in the performance of our part of an agreement between the National Park Service, Forest Service and the Montana State Game Department which obligates us to patrol the area around the ranch, Electric and Reese Creek. Ranger Frazier will patrol the antelope range within the park limits and will hunt and trap coyotes.

Telephone lines have been kept in operation during most of the month. Such breaks as have occurred have been promptly repaired by rangers in the respective districts where the trouble occurred. Assistant Chief Ranger Douglas patrolled the line between Lake and

Snake River on the 17th and 18th and made necessary repairs. This line had been out for 3 or 4 days. The severe storms of the closing days of the month have put us out of touch with Sylvan Pass and Riverside but it is expected that patrols will locate the trouble and make repairs within the next few days. There are also a number of breaks on the Soda Butte line and patrols are now out to make necessary repairs.

Assistant Chief Ranger Douglas is now at Bechler River, having arrived there about the 25th, following a tour of inspection of the South District.

Chief Ranger Woodring has been in constant touch with the game situation and has made frequent trips into the North District. He has made frequent patrols to Bunsen Peak, Terrace Mountain, Sepulchre Mountain and the antelope range along the Gardiner, and has personally counted the antelope and mountain sheep in the Gardiner district and the elk and deer in the Mammoth district and at Blacktail.

VII. POLICIES:

There were no changes in policy during the month.

VIII. COST OF OPERATION:

The cost of operating the park for the month of December, 1923, will be shown on the monthly Cost Accounting Report which will go forward as soon as prepared.

IX. OTHER MATTERS OF INTEREST:

Wild Animals

Game Conditions: The reports of game conditions from all sections of the park are highly satisfactory. Forage has been abundant and snowfall prior to the storm conditions beginning on the 24th, has been light. Temperatures prior to the 30th and 31st have been moderate. All game is in good condition despite the storm conditions of the closing days of the month. Snow depths at the Buffalo Farm, Hellroaring and Slough Creek average about two feet. Snow depths on the higher ranges are from 30 to 40 inches, and this together with low temperatures and high winds have started the animals to the lower ranges, particularly the elk and deer which have been widely scattered in small bands on the higher ranges. There has been no winter kills to date.

Elk: The Yellowstone herd has been gradually moving down into the Hellroaring, Slough Creek and Lamar River country. 3500 had congregated in this district prior to the storm conditions beginning on the 24th. There were 200 on Coyote Creek, 700 on Blacktail, 500 on Sepulchre Mountain, more than 400 on Mount Everts and numerous small bands along the branches of the

Lamar. The recent storm conditions are driving them down to the main herd which now numbers about 6000.

Two hundred were reported on the Upper Yellowstone as late as December 5th and patrols to Pelican and Cold Creeks completed on December 8 report abundant signs but only a few were seen.

Larger bands than usual have been frequenting the warm basins around Old Faithful, Fountain and Norris. Two hundred have been counted at Fountain; no count has been made at Norris but they are frequently seen and signs have been plentiful. The Gallatin herd is still well up in the park. Rangers from Gallatin Station have seen only 800 on their patrols throughout the month. These have passed on down the Gallatin valley to points outside the park. A full count of the elk has not been practical thus far for the reason that they are so widely scattered. The season's losses by hunters in regions adjacent to the park totaled 128.

Antelope: This animal, previous to December 15th, has been ranging principally along the slopes of Sepulchre, and Mount Everts and on the Gardiner flats. Small bands have also been seen on Blacktail and around Hellroaring. The main band has recently moved down to the neighborhood of Hoppe's Ranch. The fence between Gardiner and Electric was lifted on the 29th, and a total of 325 were counted at that time, which shows a substantial increase over the total of 234 submitted in my report of December 1922. A loss of two has been reported to date, one apparently died from old age and the other was killed by coyotes.

Deer: Recent counts have been made of this animal as follows: Sepulchre Mountain and vicinity 69; North boundary between Gardiner and Grevice 75; Gallatin district 15; Hellroaring district 50; Upper Geyser Basin 10, making a total of 219. They have also been seen in small numbers around Sylvan Pass, Upper Yellowstone and the Riverside District. The deer range is being extended from year to year and this figure merely indicates the numbers counted, on occasion, in the particular districts noted. Needless to say, they are thriving and increasing in numbers, and extending their range. The season's losses occasioned by hunters in regions adjacent to the park was 17.

Mountain Sheep: Rangers have made the following counts on mountain sheep to date: Mount Everts 21; Tower Falls District, including Junction Butte, 48; Mount Norris 12; Hellroaring 40, making a total of 121. The report for December 1922 showed a total count of 141, which is 20 in excess of the present count. However, weather and range conditions have been so favorable this season that a full count has not been possible. There are plenty of sheep signs on Specimen Ridge and on the high ridges beyond Mount Norris but the animals have kept well out of sight and no one has succeeded to date in getting a count on these bands. The band on Mount Norris has increased from 7 to 12 during the year and the band on Mount Everts has increased from 17 to 21. Subsequent counts will, no doubt, show an increase over the total of last year.

Wild Buffalo: Signs of buffalo were observed by rangers from the Lake Station on their patrols along Pelican and Cold Creeks but none

were seen. Ranger Dupuis observed buffalo signs on Cold Creek during the early part of the month and counted 12 near the Cold Creek Snowshoe Cabin. No effort has been made as yet to get a full count on these animals.

Tame Buffalo Herd: Conditions at the Buffalo Ranch are good. The herd is in fine shape and no feeding has been done to date. By authority of the Director six bulls consisting of outlaws and sufferers from injuries have been killed during the past two months.

Moose: Moose are commonly seen over a wide range of country. Two have recently been seen in the Gallatin District; 6 have been counted on the North Boundary near the 16 mile post - these were all fine big bulls - 36 were counted in the Upper Yellowstone during the early part of the month. None of these were seen in one band. The proportion of cows and calves were notably on the increase. The season's losses by hunters in regions adjacent to the park was 10.

Predatory Animals: 75 coyotes have been killed this season. 22 were killed in December and 53 were killed prior to December 1st. The campaign against these animals has been vigorously pursued and kills from the various districts are reported as follows: Tower Falls, 14; Blacktail 5; Hellroaring 9; Slough Creek 3; Buffalo ranch and vicinity 11; Gardiner 11; Lake 2; Snake River 2; Fountain 5; Riverside 1; Soda Butte 3; Mammoth 7; Crevice 2; total 75. Weather conditions have been unfavorable throughout the month for hunting and trapping coyotes. They were always on the alert and difficult to approach and could not be lured with bait. Extreme weather conditions and deep snow will make them more approachable and bigger kills are anticipated for next month. Wolf signs have been seen near Soda Butte and on Pelican Creek. No signs of mountain lions to date.

Game Feeding: There has been no game feeding prior to December 31. They have been grazing about the hay ranches in large numbers during the month but forage was plentiful and, previous to the 24th, comparatively free from snow, and the game has been well nourished and contented throughout. Feeding was begun last year on December 6th and a total of 45 tons was fed during the month.

Sickness and Medical Attention

Dr. J. Meek Wolfe, National Park Service physician, returned about December 15 from a leave of absence of six weeks during which time he attended special courses in surgery, including special private cases in fractures and bone surgery at the New York Post Graduate Medical School. Dr. Wolfe's work in New York was along the lines that would best fit him for the work as Park Physician.

During the month the Doctor made 17 professional calls on Park employees and received 4 office calls.

School

The school report for the month of December is attached hereto.

Accidents and Casualties

An unfortunate and tragic occurrence took place on the morning of December 9th at a point 5-1/4 miles ^{went} east of Canyon Junction on the highway between Canyon and Norris resulting in the deaths of three men - employees of the Yellowstone Park Transportation Company - and concerning which the following statements are made:

Statement of Ranger Earl S. Bowman

"On Sunday morning (December 9th) a report came to me at Lake Station that a transportation truck had been destroyed by fire on the road between Canyon and Norris and that three men had lost their lives in the truck. I immediately arranged to go to the scene of the accident.

Transportation -- a four horse sleigh and driver-- was provided by B. O. Halen, construction foreman at the Lake Hotel, and we left for Canyon Station at noon of the same day. From Canyon I phoned the Transportation Company headquarters at Mammoth and it was arranged that the driver of the sleigh (Charles Johnson) and myself should proceed at once on the road toward Norris.

We left Canyon Station at 9:30 P.M. Sunday evening and arrived at the place where the accident occurred at 12:10 A.M. Monday; the exact location being about one-fourth mile east of the wedded trees on the road between Canyon and Norris - distance from Canyon Junction 5-1/4 miles and from Norris 5-3/4 miles.

Two dead bodies were found in the cab of the truck and one dead body was lying with feet in the cab of the truck and his head and shoulders were resting in the snow that was drifted along the side of the truck. The body had apparently fallen out when the side of the cab had burned away. All the woodwork on the front end of the truck had been burned away. The bodies were burned beyond recognition.

We removed the bodies to the sleigh and made as thorough an investigation as possible under the circumstances as it was night time and bitter cold, and our only light was a kerosene lantern. We were there about forty minutes and proceeded on towards Norris at about 12:50 A.M. We arrived at Norris at 5:00 o'clock A.M., and delivered the bodies to S.E. Kammermeyer, Superintendent of the Transportation Co.

A description of the appearance and position of the bodies when found was noted as follows: One body, afterwards identified as David Broke, occupied the seat on the right hand side of the cab. He was sitting in a natural riding position with his head thrown back as though resting against the back of the cab; his legs were extended and his feet were flat on the floor; his arms were resting along the front of his chest as though folded, and his clothing was mostly burned away. To the left of his body and in the middle of the seat was another body afterwards identified as Edward J. Wright. His sitting position was very much the same as that of the body on his right, except that he was leaning considerably to the left. He had apparently been leaning against his companion on the left.

The third body, afterwards identified as Dale A. Spears, was lying on its back; the heels were resting on the floor of the cab; the middle portion of the body rested on the running board of the truck and

the head and shoulders were resting in the snow that was drifted along the side of the car. He had apparently occupied the seat on the left hand side of the car immediately behind the steering wheel and had fallen from a sitting position, similar to that of the other bodies, when the side of the cab had burned away. His legs were drawn forward and extended indicating a sitting position and his arms were in a position of rest across the front of his body. The men were all apparently dead for some time before the flames reached them; the presumption being that they were gassed by fumes from the engine which was reported to have been left running idle to provide them with warmth.

One of the foot boards from the bottom of the cab was missing, and I do not know of my own knowledge whether it had been burned away or removed by the men themselves."

Statement of Jim McDevitt. (An employee of the Yellowstone Park Transportation Company. As related by him to Earl Bowman, Ranger.)

"On Saturday morning of December 9th David Sroka, Edward J. Wright and myself left Mammoth on a four horse sleigh, that was driven by Charles Johnson, taking with us repairs for a truck that was stalled between Norris and Canyon. We proceeded to a point one mile west of Canyon Junction where the truck was located, arriving there about 2 P.M. Saturday.

Repairs were made and about 7 P.M. we proceeded toward Norris with the truck. The truck was being driven by Dale A. Spears; Sroka, Wright and myself accompanying him. We labored for about seven hours from the time we started and proceeded as rapidly as we could through the snow and at 2 o'clock Sunday morning we stopped at a point 5-3/4 miles west of Norris where we stopped with the intention of remaining the remainder of the night.

It was bitter cold and Spears, Sroka, and Wright settled themselves in the seat of the cab. The cab was curtained and closed and one of the foot boards was removed from the floor of the cab to admit warmth from the engine which they left idling.

I had my bedding and rolled up in it in the rear of the truck. I was afterwards awakened and discovered the truck to be on fire, and also immediately discovered that the men in the cab of the truck were dead. I fought the fire with snow and eventually put it out after which I remained on the spot until daylight. I then walked to Norris and phoned particulars to transportation headquarters at Mammoth."

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Chief Ranger Woodring went out and met the party that was bringing in the bodies from Norris. They were met on Swan Lake flat and he accompanied them to Mammoth. He viewed the bodies on their arrival here and helped to place them in the baskets for removal by the undertakers.

The bodies of Spears and Sroka were delivered to Undertaker Selby, of Livingston, Mont., and the body of Wright was delivered to Undertaker Banker, also of Livingston.

Identification was made by S.E.Kammermeyer of the transportation company when the bodies were delivered to him at Norris, and his identification was confirmed by Chief Mechanic Lockwood upon their arrival at Mammoth. Identification was made by articles found on the bodies of the dead.

Arrests and Violations of Law

Game Warden Deahur of Livingston, Mont., reported to the Chief Ranger on December 24th that two elk had been slain by tooth hunters in the Electric Peak district near the park line. Search warrants were issued and the premises of two suspects residing at the little settlement of Electric, whose names are Gornick and Lustick, were thoroughly searched but nothing was found. The incident has had a good deal of local publicity and will, no doubt, discourage any further depredations of this character. The elk were found in the neighborhood of the 7 and 8-mile posts, a few miles outside the park line. No other unlawful killings have been reported to date.

Religious Services

Church services were held in the Canteen every Thursday evening (excepting the week of December 23 when services were held on Wednesday, December 26) by the Rev. Geo. F. Koehler, of the English Lutheran Church of Livingston, Montana.

The Rev. W. Friend Day, of Emigrant, Montana, of the Episcopal Church, held services on Sunday morning, December 30.

IX. RECEIPTS AND REMITTANCES.

Certified check #2264, dated December 14, 1923, drawn by W. W. Nichols on the National Bank of Montana, Helena, Mont., to The Director, National Park Service, amount.....	8.52
Certified check #1561, dated December 15, 1923, drawn by W. W. Nichols on the National Bank of Montana, Helena, Mont., to The Director, National Park Service, amount.....	149.12
Certified check #2427, dated December 19, 1923, drawn by Howard H. Hays on the Northwestern National Bank of Livingston, Mont., to The Director, National Park Service, amount.....	81.60
Postal Money Order #54330, dated December 10, drawn by the Postmaster at Yellowstone Park, on the Postmaster at Washington, D.C., amount.....	3.75
Total	\$ 242.99

Cordially yours,

LEROY HILL
Acting Superintendent.

The Director,
National Park Service,
Washington, D.C.

AM

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4624

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MONTHLY METEOROLOGICAL SUMMARY.

Station, Yellowstone Park, Wyo.; month, DECEMBER, 1923. 19

Date.	TEMPERATURE (Degrees Fahrenheit.)			Precipitation. (In inches and hundredths.)	Character of day.	Sun- shine, per- cent- age.
	Max.	Min.	Mean.			
1	18	-1	8	0	Clear	97
2	29	16	22	.01	Cloudy	22
3	34	18	26	.01	PtCloudy	43
4	30	16	23	0	PtCloudy	56
5	30	18	24	.02	Cloudy	17
6	36	26	31	.24	Cloudy	0
7	36	16	26	.05	PtCloudy	76
8	21	-2	10	.06	Cloudy	4
9	14	-7	4	T	PtCloudy	75
10	21	-7	7	0	Clear	100
11	35	4	20	0	PtCloudy	89
12	25	5	15	0	PtCloudy	74
13	28	2	15	.01	PtCloudy	50
14	32	25	28	.01	Cloudy	15
15	35	24	30	0	Cloudy	6
16	44	25	34	0	Clear	99
17	43	19	31	0	Clear	97
18	36	15	26	0	PtCloudy	41
19	32	19	26	.01	PtCloudy	38
20	34	8	21	.02	PtCloudy	66
21	24	2	13	T	PtCloudy	76
22	22	-3	10	0	PtCloudy	48
23	24	12	18	T	Cloudy	11
24	30	18	24	.11	Cloudy	39
25	35	21	28	.16	Cloudy	18
26	25	-1	12	.19	Cloudy	0
27	15	-2	6	.04	Cloudy	0
28	31	13	22	.12	Cloudy	0
29	36	-16	10	.12	Cloudy	19
30	-16	-33	-24	.04	PtCloudy	39
31	-3	-34	-18	T	PtCloudy	43
Mean	27.0	6.9	17.0	1.22		44

ATMOSPHERIC PRESSURE
(Reduced to sea level; inches and hundredths.)
Mean 30.24; highest 31.14, date _____
lowest 29.27, date _____

TEMPERATURE.
Highest 44, date 16; lowest -34, date 31
Greatest daily range 52, date 29
Least daily range 7, date 14

Mean for this month in
1871 _____ 80 _____ 89 25 98 17 07 22 16 12
1872 _____ 81 _____ 90 28 99 19 08 20 17 27
1873 _____ 82 _____ 91 18 00 24 09 12 18 21
1874 _____ 83 _____ 92 16 01 22 10 23 19 18
1875 _____ 84 _____ 93 24 02 23 11 16 20 22
1876 _____ 85 _____ 94 20 03 23 12 18 21 2
1877 _____ 86 _____ 95 19 04 22 13 21 22 1
1878 _____ 87 21 96 23 05 19 14 17 23 1
1879 _____ 88 22 97 19 06 28 15 20 24 _____

Normal for this month 21.6
Absolute maximum for this month for 37 years _____
Absolute minimum for this month for 37 years _____
Average daily excess (+) or deficiency (-) of this month
with the normal -4.6
Accumulated excess (+) or deficiency (-) since January -5.17
Average daily excess (+) or deficiency (-) since January -1.7

PRECIPITATION.
Total this month 1.22; snowfall 12.8
Greatest precipitation in 24 hours 0.29, date 6-7
Snow on the ground at end of month 11.0

Total precipitation this month in
1871 _____ 80 _____ 89 8.89 98 0.67 07 0.94 16 2.47
1872 _____ 81 _____ 90 0.89 99 1.89 08 0.48 17 2.28
1873 _____ 82 _____ 91 2.77 00 1.17 09 1.27 18 0.39
1874 _____ 83 _____ 92 2.17 01 2.53 10 0.88 19 2.13
1875 _____ 84 _____ 93 1.91 02 0.85 11 1.01 20 1.26
1876 _____ 85 _____ 94 1.34 03 0.40 12 1.47 21 2.25
1877 _____ 86 _____ 95 1.29 04 1.19 13 0.25 22 1.98
1878 _____ 87 2.41 96 0.46 05 0.19 14 0.07 23 1.22
1879 _____ 88 0.80 97 1.84 06 0.89 15 0.89 24 _____

Normal for this month 1.82
Excess (+) or deficiency (-) of this month as compared with the normal -0.60
Accumulated excess (+) or deficiency (-) since January -4.46

MEAN RELATIVE HUMIDITY (Percentage).
6 a. m., 30; noon, 67; 6 p. m., 72

WIND.
Prevailing direction South; total movement 6191 miles;
average hourly velocity 8.3; maximum velocity (for five minutes) 40 miles per hour, from South
on 6

WEATHER.
Number of days, clear 4; partly cloudy 14; cloudy 13;
on which .01 inch, or more, of precipitation occurred 17

MISCELLANEOUS PHENOMENA (dates of).
Auroras 0; halos: solar 0, lunar 15, 19
Hail 0; sleet 0; fog 0
Thunderstorms 0
*Frost: light ---; heavy ---; killing ---

NOTE.—"T" indicates trace of precipitation.

In the autumn frosts are not recorded after the occurrence of "killing," except in Florida and along the immediate coast of the Gulf of Mexico.

E. H. Fletcher, Observer
Weather Bureau.